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Comments of Global Crossing North America, Inc.

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In the Matter of)
) WC Docket No. 04-36
IP-Enabled Services)

Comments of Global Crossing North America, Inc.

Global Crossing North America Inc., on behalf of its U.S. operating subsidiaries (collectively referred to as “Global Crossing”), hereby submits its initial Comments in the above-captioned proceeding pursuant to the Notice of Proposed Rulemaking (“NPRM”) released March 10, 2004. Global Crossing provides telecommunications solutions over the world’s first integrated global IP-based network. The core Global Crossing network connects more than 200 cities and 27 countries worldwide, and delivers services to more than 500 major cities, 50 countries and 5 continents around the globe. Global Crossing’s IP backbone network encompasses 27 VoIP gateway centers in 10 countries throughout North America, Europe, and Latin America and supports over 2.4 billion minutes per month while operating at a 99.999% rate of availability.

Global Crossing's services are global in scale, linking the world's enterprises, governments and carriers with customers, employees and partners worldwide in a secure environment that is ideally suited for IP-based business applications, allowing e-commerce to thrive. The company offers a full range of managed data and voice products including Global Crossing IP VPN Service, Global Crossing Managed Services

and Global Crossing VoIP services, to more than 40 percent of the Fortune 500, as well as 700 carriers, mobile operators and ISPs. It is with this vast experience supporting IP-enabled services that Global Crossing offers its comments.

In its NPRM, the Federal Communications Commission ("Commission") raised many important issues that Global Crossing is pleased to address in these Comments. While the issues associated with IP-enabled services can appear complex, it is important for the Commission to establish rules that are simple and predictable. The telecommunications industry is under severe stress and additional complexity and uncertainty would only compound matters. The solutions proposed by Global Crossing in the instant comments are therefore intended to achieve the twin goals of simplicity and predictability.

I. INTRODUCTION

Since the passage of the Telecommunications Act of 1996, the telecommunications industry has been prone to hyperbole. This led to an "over-exuberance" on the part of investors who succeeded in creating a classic investment "bubble." Now, of course, the industry continues to endure the pain and hardship of a debilitating "bursting of the bubble" from which it has yet to recover. While mindful of this previous hyperbole, the fact is that IP-enabled services do represent a new generation of services the likes of which have not been previously available to consumers or confronted by regulators and policy makers.

Whereas in the past the network defined the service, today, IP-enabled services can be supported on any network and are increasingly defined by the consumer and customer equipment. In the past, "telephone service" was provided by "telephone

companies,” “cable television” was provided by “cable television companies,” and “information services” were provided by “information service providers.” These distinctions were not imagined out of thin air. Rather, they were necessitated by the limitations on the networks themselves related to architecture, hardware, and operating systems.¹ Cable television networks could not support two-way telephony in a tree-and-branch architecture. Telephone networks could not support video distribution on the limited bandwidth of a twisted copper pair.

Today, most telephone companies have deployed fiber optics throughout their inter-office and trunking networks and, through the use of DSL technologies, greatly expanded the usable bandwidth of their remaining copper network to create a near-ubiquitous broadband network. Cable television companies have re-architected their networks using fiber optics and ring topology to create a broadband network passing over 90% of U.S. homes.² Commercial Mobile Radio Service providers (“CMRS” or “wireless”) have entered the market with their own networks that can currently provide both voice and data services and are being augmented to support broadband as well.³ Power companies are promising to offer their own broadband capabilities⁴ and the MFJ has been superseded by the Telecommunications Act of 1996.

None of these platforms are designed with a particular service in mind as networks of the past were designed. Instead, these broadband networks are designed to support all forms of IP-enabled services – voice, video, and data. So it no longer matters

¹ In addition, the Bell Operating Companies were prohibited from providing information services by the Modified Final Judgment (“MFJ”).

² Source: www.NCTA.com

³ Source: www.ctia.org

⁴ See, Carrier Current Systems including Broadband over Power Line Systems: Amendment of Part 15 regarding new requirements and measurement guidelines for Access Broadband over Power Line Systems, Notice of Proposed Rulemaking in ET Docket Nos. 03-104 and 04-37 (rel. February 23, 2004).

what type of network one owns or operates because they are all essentially the same type of network – Internet Protocol or IP. The benefits of this advancement are potentially enormous for consumers, but only if regulators and policy makers recognize the implications of this development for regulation and public policy.

The Commission's existing public utility regulatory framework under Title II, Title III, and Title VI of the Communications Act of 1934, as amended (the "Act") along with various state regulations governs the provision of telephone and cable television connections to the home or office.⁵ The Commission also has established an elaborate set of rules and regulations governing interconnection between carriers under Title II of the Act.⁶ This framework, however, is wholly inapplicable and irrelevant to IP-enabled services. IP-enabled services are essentially applications delivered over a broadband connection and are not readily amenable to Title II and Title VI regulation. Moreover, as simply an application, the Commission must have a compelling reason to justify the regulation of IP-enabled services. As Congress declared, it "is the policy of the United States" to "preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation."⁷

Of course, the regulatory treatment of IP-enabled services is very broad and includes the questions correctly raised in the NPRM regarding inter-carrier compensation, universal service, support for public safety applications, services to the disabled, and cooperation with law enforcement. The Commission cannot consider IP-

⁵ In the NPRM, the Commission examines its forbearance authority for wireless carriers. Forbearance for wireless carriers only would unfairly favor the wireless provision of IP-enabled services. For this reason, the Commission should treat all broadband platforms equally.

⁶ 47 C.F.R. Part 51

⁷ 47 U.S.C. Sec. 230(b)(2)

enabled services in a vacuum and must develop a holistic approach, but it must do so mindful of Congress's intent.

It is within this context that the Commission must consider its future treatment of IP-enabled services. Global Crossing believes the Commission has the opportunity in the instant proceeding to set the future course of deregulation. In these comments, Global Crossing proposes its REFORM agenda that is simply stated as follows:

Rationalize inter-carrier compensation
Establish a swift and efficient dispute resolution forum
Formulate clear and simple rules and regulations
Overhaul universal service
Redefine public interest obligations
Maintain authority over essential bottleneck facilities

It is only through this comprehensive approach that the Commission will be able to unleash the full benefits to consumers of IP-enabled services and restore investor confidence in the telecommunications industry.

II. CATEGORIZING IP-ENABLED SERVICES

When determining the proper treatment of IP-enabled services, the Commission must first be precise in its definitions and categorizations. As stated in the NPRM, IP-enabled services include "services and applications relying on the Internet Protocol family."⁸ The Commission suggests numerous sub-categorizations of IP-enabled services and questions whether different categories of services warrant different regulatory treatment.⁹ Unfortunately, the Commission neglects to address the threshold issue of

⁸ NPRM para 1, p. 2, fn. 1

⁹ NPRM para 35-37, pp. 24-28.

whether IP-enabled services even constitute telecommunications or telecommunications services.

The Commission examined this basic question at length in its recent *Pulver* decision¹⁰ and it is from that foundation that *Global Crossing* examines IP-enabled services in general. As the Commission explained in *Pulver*, “telecommunications” is defined in the Act as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received”¹¹ and a “telecommunications service” is defined as “the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.”¹² In *Pulver*, the Commission concluded that the Free World Dialup service offered by Pulver is not telecommunications because members “bring their own broadband.”¹³

Pulver therefore stands for the notion that IP-enabled services offered over pre-existing broadband connections are not telecommunications or telecommunications services.¹⁴ Instead, under the Commission’s *Pulver* decision, IP-enabled services offered in this manner are categorized as information services subject to exclusive federal jurisdiction.

Global Crossing supports the Commission’s logic in *Pulver*, but recognizes that it creates an arbitrage incentive. If IP-enabled services are defined as information services when delivered over a pre-existing broadband connection, but are defined as something

¹⁰ *Petition for Declaratory Ruling that pulver.com’s Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, WC Docket No. 03-45, Memorandum Opinion and Order, FCC 04-27 (rel. February 19, 2004) (“*Pulver*”).

¹¹ 47 U.S.C. Sec. 153(43)

¹² 47 U.S.C. Sec. 153(46)

¹³ *Pulver* at para 9, p. 6

¹⁴ The Commission has defined “broadband” as “those services having the capability to support both upstream and downstream speeds in excess of 200 Kbps in the last mile.” *See*, NPRM at footnote 3.

else, perhaps a telecommunications service, when sold in conjunction with a broadband connection, then providers have an incentive to game the sales process in order to achieve the desired outcome. This would be achieved by either combining the sale of a broadband connection with the sale of an application in order to treat the sale as, perhaps, a telecommunications service, or to bifurcate the sale and sell the broadband connection “first” in order to treat the application provided over the broadband connection as an information service.

In order to avoid this and to maintain simplicity and provide certainty and predictability to an industry in desperate need of it, Global Crossing sees no alternative but to treat all IP-enabled services as information services subject to exclusive federal jurisdiction. To do otherwise invites obfuscation and friction that will only serve to keep the telecommunications industry mired in its perpetual cycle of litigation.

Of course, such a broad-based rule requires a precise definition of IP-enabled services. In this regard, the definition of “IP platform services” provided by SBC Communications Inc. in its Petition for a Declaratory Ruling¹⁵ may prove useful. SBC defined IP platform services consisting of “(a) IP networks and their associated capabilities and functionalities (i.e., an IP platform), and (b) IP services and applications provided over an IP platform that enable an end user to send or receive a communication in IP format.”¹⁶ Global Crossing finds this definition, and SBC’s justifications for it, compelling with one caveat. Global Crossing believes that the broadband connection serving the customer should remain subject to existing Title II, Title III or Title VI regulation depending on whether the connection is provided by a telephone company,

¹⁵ *Petition of SBC Communications Inc. For a Declaratory Ruling Regarding IP Platform Services*, WC Docket No. 04-29 (rel. February 12, 2004).

¹⁶ SBC Petition at 1, fn 3.

CMRS provider, or cable television company.¹⁷ In this way, applicable consumer protection and unbundling rules will continue in force.

III. APPROPRIATE LEGAL AND REGULATORY FRAMEWORK

It is important for the Commission to establish the appropriate legal and regulatory framework for IP-enabled services to encourage continued investment in IP technology and provide certainty and predictability to the telecommunications market. Simply classifying IP-enabled services as information services subject to exclusive federal jurisdiction does not accomplish this goal. The Commission must comprehensively address a multitude of issues and the instant proceeding is only one aspect of this effort. Global Crossing believes the Commission needs to embark on a broad-based effort to establish definitive policies in several key areas as explained in our REFORM agenda.

As Chairman Powell and others noted during the Commission's December 1, 2003 VoIP Forum¹⁸, there exists the constant potential for "off-shoring" of IP-enabled services. That is, since IP-enabled services are accessible over broadband Internet connections, they can be provided from distant locations outside the jurisdiction of the Commission. Rather than view this as a problem, Global Crossing views it as a marketplace check on the reasonableness of public policy. A policy that over-burdens IP-enabled service providers will drive them overseas, beyond the reach of the Commission.

¹⁷ Broadband connections offered by power line companies would be subject to the regulatory regime established by the Commission following a proper rulemaking proceeding. Global Crossing also recognizes that the Commission has attempted to regulate the provision of cable modem services under Title I. Global Crossing supports such an outcome as well.

¹⁸ FCC Voice Over Internet Protocol Forum (December 1, 2003), available at <http://www.fcc.gov/voip/voipforum.html>.

Global Crossing's REFORM agenda seeks to establish a policy framework that will encourage the domestic development of IP-enabled services.

A. Rationalize inter-carrier compensation

One of the reasons there is such great interest in the regulatory treatment of IP-enabled services is due to the belief that such services are exempt from the access charges imposed by local exchange carriers ("LECs"). Viewed in this way, IP-enabled services are simply an arbitrage vehicle. As the Commission itself has recognized,¹⁹ the multiple forms of inter-carrier compensation in existence today contribute to an unwieldy arrangement that invites abuse, confusion, litigation, and uneconomic bypass. It is imperative that the Commission establishes a uniform system of inter-carrier compensation that applies to all forms of traffic and all carriers. Global Crossing believes, however, that the Commission must not only conclude that "a minute is a minute," it must also conclude that "a packet is a packet." Moreover, the Commission must allow all packets to be exchanged without the distortion of past regulatory policies.

Global Crossing understands the challenges the Commission faces in attempting to satisfy the competing interests associated with intercarrier compensation reform. Global Crossing frankly believes that the Commission should not attempt to dictate an outcome to this debate, but rather should establish a process whereby carriers themselves are able to resolve the issue on a bilateral basis.²⁰

¹⁹ See, *Developing a Unified Intercarrier Compensation Regime*, Notice of Proposed Rulemaking, cc Docket No. 01-92, 16 FCC Rcd 9610 (2001).

²⁰ The industry has been meeting for over ten months in an attempt to arrive at a common solution to the issues presented by intercarrier compensation reform. Those efforts continue without full consensus. Global Crossing is participating in the industry effort and continues to work towards an industry solution. In the absence of one, however, Global Crossing advocates a process that allows individual carriers to negotiate their own solution.

Within the context of the instant proceeding, the Commission can establish the proper ground rules for successful bilateral negotiations between carriers by instituting the following measures:

- Affirmatively declare carriers’²¹ rights to route IP-originated²² voice traffic through existing and future, private and public, peering and transit arrangements;
- Prohibit any carrier (including IP-enabled service providers) from refusing to accept IP-originated voice traffic through existing and future, private and public, peering and transit arrangements;
- Allow carriers (including IP-enabled service providers) to negotiate for the termination of IP-originated voice traffic through peering and transit arrangements without regard to the traditional access charge and reciprocal compensation regimes;
- Prohibit carriers from imposing usage-sensitive charges unless mutually agreed to by the parties.

These measures will facilitate the fair negotiation of inter-carrier compensation arrangements suitable to the particular form of IP-enabled service. As the Commission has recognized, IP-enabled services is a broad term encompassing many variations of services.²³ Such variety does not lend itself to a “one-size-fits-all” solution. Instead, the

²¹ Carriers in this context includes providers of IP-enabled services

²² IP-originated refers to traffic that is originated by an end user in the IP protocol.

²³ See, e.g., Section III of the NPRM.

Commission should encourage the individualized negotiation of inter-carrier compensation arrangements for IP-enabled services.²⁴

B. Establish a swift and efficient dispute resolution forum

Of course, in order to make such negotiations an effective solution, the Commission must establish a swift and efficient dispute resolution forum to resolve inter-carrier compensation and interconnection disputes. The Commission's effort to establish "rocket docket"²⁵ was an admirable attempt, but a more rigorous approach is required. Global Crossing proposes that the Commission, in the instant proceeding, require all carriers (including IP-enabled service providers) to submit to "baseball-style" arbitration. Baseball-style arbitration requires each party puts forth its best and final offer and a neutral third-party arbitrator is required to select only one offer, in its entirety.²⁶ This style of arbitration will encourage carriers to narrow their differences and seek compromise, but in order to be effective, the arbitration must be the sole remedy available to carriers (including IP-enabled service providers).

C. Formulate clear and simple rules and regulations

As explained above, clear and definitive rules regarding IP-enabled services is a critical prerequisite to bringing certainty and growth to the telecommunications industry. Vague or overly complex rules and regulations fail to establish viable solutions to the industry's challenges and simply create a climate of uncertainty. This uncertainty only gets resolved through time-consuming and extremely costly litigation. The seemingly perpetual debate and litigation surrounding the availability of unbundled network

²⁴ In order to preserve the individuality of the negotiated outcome, the Commission cannot apply a "pick-and-choose"-type rule to these negotiations.

²⁵ 47 C.F.R. § 1.730.

²⁶ The two parties to the arbitration could mutually agree to an arbitrator.

elements is but the latest example of this. Indeed, the regulatory process itself is increasingly becoming a barrier to entry in the telecommunications industry because only very large, well-funded entities have the resources to perpetually litigate an issue and thus shape the pace and direction of regulations.

The industry can no longer afford this form of rulemaking whereby final rules are established by the courts only after years of litigation and tremendous expense. The old axiom “justice delayed is justice denied” holds especially true in this context as litigation delays prevent carriers from efficiently executing their business plans and serving consumers. The Commission must simplify its rules and eliminate vagaries.

Within the context of the instant proceeding, the Commission must avoid the temptation to segregate the market into numerous sub-categories as it suggests in the NPRM. This only invites gamesmanship and introduces perverse incentives for technology and service delivery choices. Instead, the Commission should treat all IP-enabled services the same – as information services subject to exclusive federal jurisdiction.

D. Overhaul universal service

Any comprehensive reform effort must include an overhaul of the current universal service system that is just as dysfunctional as the inter-carrier compensation regime. Global Crossing believes the Commission should modify the existing universal service program, especially in light of the rapid development of IP-enabled services. Appropriate modifications can be addressed in existing universal service proceedings currently before the Commission consistent with four guiding principles:

- the universal service fund should be sized appropriately so that it only supports universal service objectives;
- the Commission should refine its eligibility criteria so that the fund is not used as an earnings support mechanism for carriers;
- source funding must be broad-based and competitively neutral; and
- disbursements from the fund should be keyed to the removal of implicit subsidies embedded in the rates of recipients.

As stated above, the Commission has several proceedings underway examining various aspects of universal service. However, in the context of the instant proceeding, it is important for the Commission to recognize that IP-enabled services present a particular challenge with regards to establishing a competitively neutral funding source. There are currently two predominant proposals for funding universal service, each of which merits re-examination in the context of IP-enabled services. The first is a proposal to assess universal service fees based upon the number of “connections” and the second is to base the universal service fee on the number of telephone numbers assigned to a carrier.²⁷ Due to the nature of IP-enabled services, “taxing” carriers based on connections or use of telephone numbers is a short-term solution subject to bypass. As an initial matter, IP-enabled services can be supported over pre-existing broadband connections and there is no way to determine which IP-enabled service provider a consumer is utilizing in this situation. Therefore, a connections-based funding mechanism would not properly capture IP-enabled service providers and would disproportionately burden facilities-based providers.

²⁷ See, e.g., Federal-State Joint Board on Universal Services, Recommended Decision, CC Docket No. 96-45, FCC 04J-1 (rel. Feb. 27, 2004).

Similarly, a funding mechanism based upon the use of telephone numbers would not necessarily capture IP-enabled service providers either. As Pulver demonstrates, IP-enabled service providers do not need to assign traditional telephone numbers to their end user customers. Indeed, considering the exhaust pressures on the North American Numbering Plan (“NANP”) and the potential for a host of new IP-enabled services that may require “telephone numbers,” it is not unreasonable to assume that the NANP as it is known today is simply a transitional vehicle to a new numbering system.²⁸

The fundamental shortcoming of the current universal service funding mechanisms under consideration is that they are based upon network characteristics at a time when the network is being divorced from the services that utilize the network. Therefore, a universal service funding mechanism based upon network characteristics will disproportionately burden facilities-based network providers and provide ample opportunity for IP-enabled service providers to bypass the funding mechanism.

In the IP environment, the optimal universal service funding mechanism is one that derives its funding from “attachments to the network.” Annual spending in the U.S. on information and communications technologies ranges between \$400 billion to over \$800 billion depending upon how you measure it²⁹. A *de minimus* tax levied on the full range of information technologies would ensure a stable, broad-based support mechanism for universal service. Moreover, it would be all-inclusive and ensure that everyone who benefits from a universal broadband network supports universal service.

²⁸ The efforts surrounding electronic numbers (“ENUM”) are but one example of how the telecommunications industry is examining the interoperability of NANP resources with IP services.

²⁹ 2002 *Digital Planet*, published by the World Information Technology and Services Alliance, estimates U.S. spending on information and communications technologies to be \$866 billion. Forrester Research estimates spending to be approximately \$400 billion excluding information technology services, outsourcing, payroll and benefits.

E. Redefine public interest obligations

Telecommunications service in the U.S. has historically been imbued with a public interest component and IP-enabled services offer a broad range of new and innovative ways to support traditional public interest efforts. In its NPRM, the Commission inquires specifically into 911/E911 service.³⁰ Global Crossing supports the VON Coalition's efforts to work with the National Emergency Number Association ("NENA") to develop appropriate solutions in this regard. However, the Commission needs to recognize that the greatest challenge for 911/E911 service is securing proper funding for the Public Safety Answering Points ("PSAPs").

PSAPs are limited economically in their ability to take advantage of the full features and functionality of IP-enabled services. If funded appropriately, PSAPs can upgrade their equipment, technology and training to develop a comprehensive 911/E911 capability that takes full advantage of what IP-enabled services can do. Unfortunately, local authorities and the telecommunications industry are under severe economic stress and adequate funding for these efforts presents a challenge. Global Crossing looks forward to working with the industry, NENA, and the Commission to develop suitable solutions to these challenges.

F. Maintain authority over essential bottleneck facilities

While IP-enabled services present a multitude of new opportunities and present consumers many competitive options, it is imperative that the Commission maintain

³⁰ Issues related to CALEA are addressed in a separate docket. *See, In the Matter of United States Department of Justice, Federal Bureau of Investigation and Drug Enforcement Administration Joint Petition for Rulemaking to Resolve Various Outstanding Issues Concerning the Implementation of the Communications Assistance for Law Enforcement Act*, RM-10865 (rel. March 12, 2004).

authority over essential bottleneck facilities. This means that unbundling and interconnection requirements must continue to adhere to Title II common carriers.³¹ Similarly, if a new bottleneck materializes in the IP universe, the Commission should exercise its Title I authority to ameliorate the ill effects of such a bottleneck.³²

IV. CONCLUSION

What is the basis for regulation? It is to provide certain protections from monopoly abuse and to ensure the public health, safety, and welfare. The competitive development of broadband platforms along with the separation of transport from applications that is inherent in IP-enabled services is weakening historic monopoly control. IP-enabled services offer dynamic and robust opportunities to serve the public health, safety, and welfare that are limited only by the available funding to the public sector partners. The Commission must keep pace with these developments and implement the policies now that will enable the future.

Global Crossing has proposed a simple REFORM agenda that will allow the telecommunications industry to make rational investment decisions in a climate of certainty and predictability. Global Crossing's REFORM agenda will eliminate the rampant gamesmanship and greatly simplify the regulatory environment. Because the Commission cannot possibly establish an appropriate interconnection regime for such a dynamic and technologically driven industry, Global Crossing's REFORM agenda relies on the ability of carriers (including IP-enabled service providers) to negotiate suitable arrangements amongst themselves comfortable in the knowledge that there is a swift and

³¹ The requirement for incumbent LECs to provide an Unbundled Network Element platform could be sunset if the LECs provide an economically reasonable discount on the resale of their local exchange service.

³² Existing anti-trust and FTC regulations would also be relevant.

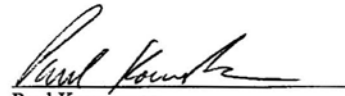
efficient dispute resolution process available to resolve differences. For all of these reasons, Global Crossing respectfully requests the Commission to:

- declare all forms of IP-enabled services to be information services subject to exclusive federal jurisdiction;
- order carriers (including IP-enabled service providers) to negotiate appropriate interconnection and inter-carrier compensation arrangements for IP-enabled services;
- establish a swift and efficient "baseball-style" arbitration procedure to resolve interconnection and inter-carrier compensation disputes;
- maintain authority over bottleneck facilities.

Global Crossing believes these measures will help restore the economic health of the telecommunications industry and unleash a new era of innovation and investment.

Respectfully submitted,

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